

Tech Tip: Maintaining Proper SPF Material Temperatures

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SPFA

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Maintaining Proper SPF Material Temperatures

Let’s face it – you spent a lot of money for the material in those drums. And it can make you a lot of money as well, if you treat it properly.

There are two extremes of temperature that you face in the field-

- The bitter **COLD** that you see at the beginning or end of the spray season; and
- Those really **HOT** days of mid to late summer (the rest of the time it is more or less pleasant).

Because of these changes in climate, many system houses offer formulations specially modified for the season –

- **Regular** – for most of the season;
- **Summer** – for those very HOT days
- **Winter** – for the colder days of the year to get you going earlier and keep you going later in the spray season.

There are things you need to do to protect that investment especially in the extremes of the season:

FIRST RULE: ALWAYS SEEK THE ADVICE OF YOUR SYSTEM SUPPLIER FOR OPTIMAL MATERIAL STORAGE AND USE TEMPERATURES FOR THE SYSTEM YOU ARE USING!

WINTER – maintain your drums in a warm area away from cold drafts

- **FREEZING - Protect the material from freezing which could happen in shipping, storage, or in the field.**

This may not mean 32F, but could happen 10-15 degrees above or below that. The formulation may **SEPARATE** with freezing causing a disaster on your jobsite. If you suspect frozen material – place it in a warm holding room [between 80-100F] for a day and then tumble or roll drums to re-mix contents. Do not open before this tumbling.

- **VISCOSITY DRIFT - Every 10EC (18E F) drop in temperature will double viscosity!**

If your B-side viscosity is 700 cps at 77F, it will quickly thicken with temperature drop. This change in temperature will thicken your system, stall your pumps, and throw you **OFF-RATIO!**

C	F	B-side	A-side
25	77	700 cps	200 cps
15	59	1400	400
5	41	2800	800

Low heat flux blanket-type heaters work well to maintain drum temperatures. Avoid use of band-type heaters or other high heat flux heaters. Check with your SPF and equipment manufacturer before using on specific SPF systems.

SUMMER – maintain your drums in a cool area [70-80F], out of direct sunlight.

- **BULGING DRUMS** – The temperature at which B-side drums will develop enough pressure to bulge depends on the type of drum and the SPF formulation.


A bulged drum is not only a nuisance; it will result in **off – ratio foam, increased density, and loss in coverage** [square feet per kit]. All very expensive to you, the applicator! ***ALWAYS SEEK THE ADVICE OF YOUR SYSTEM SUPPLIER FOR OPTIMAL MATERIAL STORAGE AND USE TEMPERATURES FOR THE SYSTEM YOU ARE USING!***

- **SHELF LIFE** – Storage temperatures which exceed the manufacturer’s recommendations will shorten the shelf life of SPF materials.

GENERAL SPRAYING

Keep your spray inventory close to room temperature [70 – 80 F], unless advised otherwise by your supplier.

Finally - ***ALWAYS SEEK THE ADVICE OF YOUR SYSTEM SUPPLIER FOR OPTIMAL MATERIAL STORAGE AND USE TEMPERATURES FOR THE SYSTEM YOU ARE USING!***



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